CLAIMS

1: A guiding system for a sliding door, in particular of a motor vehicle, comprising

a runner rail (5) with an upper cover (6) and a lower termination (7) arranged opposite the upper cover (6), and

a rolling element (1; 101; 201), with a rolling element housing (2; 102; 202), guided in the runner rail (5),

three rollers (3, 4; 103, 104; 203, 204) being rotatably fastened to the rolling element housing (2,102; 202),

two rollers (3; 103; 203) running along the runner rail (5) against the upper cover (61 and the third roller (4; 104; 204) running along the runner rail (5) against the lower termination (7),

characterized in that a spring element (9; 109; 209) is fastened to the rolling element housing (2; 102; 202), and loads one of the first two rollers (3; 103; 203) and the third roller (4; 104; 204) against the runner rail (5).

2: The guiding system as claimed in claim 1, characterized in that a fork (8; 108; 208) is coupled to the rolling element housing (2; 102; 202) so as to be rotatable about a horizontal axis, in that one of the first two rollers (3; 103; 203) and the third roller (4; 104; 204) are fastened to the fork (8; 108; 208), and in that the spring element (9; 109; 209) engages on the fork (8; 108; 208) in such a way that it rotates the fork (8; 108; 208) about the horizontal axis of the fork (8; 108; 208).

3: Guiding system as claimed in claim 2, characterized in that a rotation of the fork (8; 108; 208) about a vertical axis of the fork (8; 108; 208) is suppressed by means of a return stop (12; 112; 212).

4: Guiding system as claimed in one of claims 1 to 3, characterized in that at least one of the rollers (3, 4; 103, 104; 203, 204) is pivotable about a vertical axis.

5: Guiding system as claimed in one of claims 1 to 4, characterized in that the two first rollers (3; 103; 203) are aligned in the linear direction of movement.

6: Guiding system as claimed in one of claims 1 to 5, characterized in that the runner rail (5) has a straight section, and in that, in the straight section, one of the upper cover (6) and lower termination (7) has a V-shaped section.

7: Guiding system as claimed in one of claims 1 to 6, characterized in that the runner rail (5) has a curved section, and in that, in the curved section, one of the upper cover (6) and lower termination (7) has a trough-shaped section.

8: Guiding system as claimed in one of claims 1 to 7, characterized in that the runner rail (5) has, at least at one end, an insertion opening for the rolling element (1), which opening widens in the vertical direction with a small gradient.

9: Guiding system as claimed in one of claims 1 to 8, characterized in that the runner rail (5) is designed in one part with the upper cover (6) and the lower termination (7) and substantially approximately encloses the movement track of the rolling element (1) on three sides.